WHAT IS CLAIMED IS:

1. A method of repairing a joint in an animal, comprising:

injecting into said joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier.

2. The method of Claim 1 wherein said pharmaceutical carrier is hyaluronan.

3. The method of Claim 1 wherein said joint is selected from the group consisting of knee, hip, shoulder, ankle, wrist, elbow, tarsal and metatarsal joints, spine and carpal and metacarpal joints.

4. The method of Claim 1 wherein said mesenchymal stem cells are autologous to the recipient.

5. The method of Claim 1 wherein said mesenchymal stem cells are allogeneic to the recipient.

6. A method of treating osteoarthritis in an animal, comprising:

injecting into a joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier.

7. The method of Claim 6 wherein said carrier is hyaluronan.

8. The method of Claim 6 wherein said joint is selected from the group consisting of knee, hip, shoulder, ankle, wrist, elbow, tarsal and metatarsal joints, spine, carpal and metacarpal joints, and the temporal mandibular joint.

9. The method of Claim 6 wherein said mesenchymal stem cells are autologous to the recipient.

10. The method of Claim 6 wherein said mesenchymal stem cells are allogeneic to the recipient.

11. A method of reducing inflammation in a joint in an animal, comprising:

injecting into said joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier.

12. The method of Claim 11 wherein said acceptable pharmaceutical carrier is hyaluronan.

13. The method of Claim 11 wherein said joint is selected from the group consisting of knee, hip, shoulder, ankle, wrist, elbow, tarsal and

metatarsal joints, spine, carpal and metacarpal joints, and the temporal mandibular joint.

14. The method of Claim 11 wherein said mesenchymal stem cells are autologous to the recipient.

15. The method of Claim 11 wherein said mesenchymal stem cells are allogeneic to the recipient.

16. A method of regenerating meniscal tissue in a joint in an animal, comprising:

injecting into said joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier.

17. The method of Claim 16 wherein said injection is into the joint space of said joint.

18. The method of Claim 16 wherein said pharmaceutical carrier is hyaluronan.

19. The method of Claim 16 wherein said joint is selected from the group consisting of knee, hip, shoulder, ankle, wrist, elbow, tarsal and metatarsal joints, and carpal, metacarpal joints, and the temporal mandibular joint.

20. The method of Claim 16 wherein said mesenchymal stem cells are autologous to the recipient.

21. The method of Claim 16 wherein said mesenchymal stem cells are allogeneic to the recipient.

22. A method of stabilizing an injured joint in an animal, comprising:

injecting into said joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier.

23. A method of protecting cartilage in a joint in an animal, comprising:

injecting mesenchymal stem cells into said joint in conjunction with an acceptable pharmaceutical carrier.

24. A method of reducing joint pain in an animal, comprising:

injecting mesenchymal stem cells to said joint in conjunction with an acceptable pharmaceutical carrier, whereby said mesenchymal stem cells differentiate into meniscal tissue.

25.   A method of preventing or reducing subchondral bone sclerosis in a joint, comprising:

injecting mesenchymal stem cells into said joint in conjunction with an acceptable pharmaceutical carrier.

26.   A method of preventing or reducing the formation of osteophytes in a joint, comprising:

injecting mesenchymal stem cells into said joint in conjunction with an acceptable pharmaceutical carrier.

27.   A method of repairing meniscal damage in a joint, comprising:

injecting into said joint mesenchymal stem cells in conjunction with an acceptable pharmaceutical carrier, said mesenchymal stem cells being injected in an amount effective to repair said meniscal damage in said joint.